



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0069; Product Identifier 2013-NM-090-AD; Amendment 39-19181; AD 2018-03-08]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are superseding Airworthiness Directive (AD) 2005-19-28, which applied to certain Airbus Model A330-301, -321, -322, -341, and -342 airplanes; and Model A340-200 and A340-300 series airplanes. AD 2005-19-28 required repetitive inspections for cracks in the aft face of the rear spar at the area adjacent to the bolt holes and the end of the build slot, and repair if necessary. AD 2005-19-28 also provided an optional terminating action for the repetitive inspections. This new AD was prompted by the results of a new fatigue and damage tolerance assessment, which determined that several compliance thresholds and intervals needed to be reduced. This AD requires contacting the FAA to obtain instructions for addressing the unsafe condition on these products, and doing the actions specified in those instructions. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0069; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office

(telephone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone: 425-227-1138; fax: 425-227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

As described in FAA Advisory Circular 120-104 (http://www.faa.gov/documentLibrary/media/Advisory_Circular/120-104.pdf), several programs have been developed to support initiatives that will ensure the continued airworthiness of aging airplane structure. The last element of those initiatives is the requirement to establish a limit of validity (LOV) of the engineering data that support the structural maintenance program under 14 CFR 26.21. This AD is the result of an assessment of the previously established programs by the design approval holder (DAH) during the process of establishing the LOV for the affected airplanes. The actions specified in this AD are necessary to complete certain programs to ensure the continued airworthiness of aging airplane structure and to support an airplane reaching its LOV.

We issued AD 2005-19-28, Amendment 39-14293 (70 FR 57493, October 3, 2005) (“AD 2005-19-28”), which applied to certain Airbus Model A330-301, -321, -322, -341, and -342 airplanes; and Model A340-200 and A340-300 series airplanes.

AD 2005-19-28 was prompted by a report that, during fatigue tests of the wing, cracks were found in the vertical web of the rear spar between ribs 1 and 2 having initiated at the

build slot. AD 2005-19-28 required repetitive inspections for cracks in the aft face of the rear spar at the area adjacent to the bolt holes and the end of the build slot, and repair if necessary. AD 2005-19-28 also provided an optional terminating action for the repetitive inspections. We issued AD 2005-19-28 to detect and correct fatigue cracking in the vertical web of the wing rear spar, which could result in reduced structural integrity of the wing.

Since we issued AD 2005-19-28, a new fatigue and damage tolerance assessment was done, taking into account airplane utilization and widespread fatigue damage analysis. This analysis led to the determination that several compliance thresholds and intervals needed to be reduced. We have also determined that the unsafe condition is not applicable to Airbus Model A330-341 airplanes.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2013-0101, dated April 30, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus Model A330-301, -321, -322, and -342 airplanes; and Model A340-200 and A340-300 series airplanes. The MCAI states:

During wing fatigue test, a crack was detected which propagated from the tip of the build slot in the vertical web of the wing inner rear spar between rib 1 and 2.

This condition, if not detected and corrected, could lead to reduced structural integrity of the wing.

To address this potentially unsafe condition, [Direction Générale de l'Aviation Civile] DGAC France issued AD 2001-268(B)R1 and AD 2001-269(B) [which

correspond to FAA AD 2005-19-28] to require repetitive High Frequency Eddy Current (HFEC) inspections of the aft face of the inner rear spar web in the area adjacent to the outboard end of the build slot and, depending of findings, repair of the inner rear spar web.

Since these [DGAC France] ADs were issued, in the frame of a new fatigue and damage tolerance evaluation, taking into account aeroplane utilization and Widespread Fatigue Damage (WFD) analysis, the thresholds and intervals of the affected inspections have been reassessed. This reassessment led to the amendment of several thresholds and to the reduction of inspection intervals to allow timely detection of cracks and to the accomplishment of applicable corrective actions. EASA issued AD 2013-0092, which retained the requirements of DGAC France AD 2001-268(B)R1 and AD 2001-269(B), which were superseded, but required those actions within the new thresholds and intervals.

Since issuance of EASA AD 2013-0092, it has been discovered that certain A330 aeroplanes, incorporating another modification in production, must be excluded from the Applicability. In addition, it has been found necessary to clarify that for the initial inspection, the previous thresholds (to be counted from aeroplane first flight) or intervals, as required by [DGAC France] AD 2001-268(B)R1 and [DGAC France] AD 2001-269(B), cannot be exceeded.

For the reasons described above, this [EASA] AD partially retains the requirements of EASA AD 2013-0092, which is superseded, and introduces the changes as outlined above.

You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0069.

FAA's Determination and Requirements of this AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with

the State of Design Authority, we have been notified of the unsafe condition described in the MCAI. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of these same type designs.

FAA's Determination of the Effective Date

Since there are currently no domestic operators of this product, we find good cause that notice and opportunity for prior public comment are unnecessary. In addition, for the reason(s) stated above, we find that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2018-0069; Product Identifier 2013-NM-090-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

Costs of Compliance

Currently, there are no affected U.S.-registered airplanes. This AD requires contacting the FAA to obtain instructions for addressing the unsafe condition, and doing the actions specified in those instructions. Based on the actions specified in the MCAI AD, we are providing the following cost estimates for an affected airplane that is placed on the U.S. Register in the future:

Estimated costs

| Action | Labor cost | Parts cost | Cost per product |
|---|---|------------|----------------------------|
| HFEC inspection [retained action from AD 2005-19-28 with reduced threshold and intervals] | 4 work-hours X \$85 per hour = \$340 per inspection cycle | \$0 | \$340 per inspection cycle |
| Modification [retained action from AD 2005-19-28] | 153 work-hours X \$85 per hour = \$13,005 | \$0 | \$13,005 |

We estimate the following costs to do any necessary on-condition repairs that would be required based on the results of the required actions:

On-condition costs

| Action | Labor cost | Parts cost | Cost per product |
|---|---|-------------|------------------|
| Repair [retained action from AD 2005-19-28] | 85 work-hours X \$85 per hour = \$7,225 | Unavailable | \$7,225 |

We acknowledge that since the above actions are retained from AD 2005-19-28, but with reduced threshold and intervals, operators would essentially revise their maintenance or inspection program, as applicable, to incorporate the reduced threshold

and intervals. We estimate the revision to an operator's maintenance and inspection program would take approximately 1 work-hour x \$85 per hour.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2005-19-28, Amendment 39-14293 (70 FR 57493, October 3, 2005), and adding the following new AD:

2018-03-08 Airbus: Amendment 39-19181; Docket No. FAA-2018-0069; Product Identifier 2013-NM-090-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2005-19-28, Amendment 39-14293 (70 FR 57493, October 3, 2005) (“AD 2005-19-28”).

(c) Applicability

This AD applies to the Airbus airplanes specified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) Model A330-301, -321, -322, and -342 airplanes, all manufacturers serial numbers, except those on which Airbus modification 42547 or 44599 has been embodied in production.

(2) Model A340-211, -212, -213, -311, -312, and -313 airplanes, all manufacturer serial numbers, except those on which Airbus modification 42547 or 41300 has been embodied in production.

(d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

(e) Reason

This AD was prompted by a report that, during fatigue tests of the wing, cracks were found in the vertical web of the rear spar between ribs 1 and 2 having initiated at the build slot, and a determination that several compliance thresholds and intervals need to be reduced. We are issuing this AD to detect and correct fatigue cracking in the vertical web of the wing rear spar, which could result in reduced structural integrity of the wing.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Action(s)

Within 30 days after the effective date of this AD, request instructions from the Manager, International Section, Transport Standards Branch, FAA, to address the unsafe condition specified in paragraph (e) of this AD; and accomplish the action(s) at the times specified in, and in accordance with, those instructions. Guidance can be found in Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency (EASA) AD 2013-0101, dated April 30, 2013.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in

paragraph (i)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Related Information

(1) Refer to MCAI EASA AD 2013-0101, dated April 30, 2013, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0069.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

(j) Material Incorporated by Reference

None.

Issued in Renton, Washington, on January 26, 2018.

Michael Kaszycki,
Acting Director,
System Oversight Division,
Aircraft Certification Service.
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